

## West Nile Virus Infection

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What is West Nile virus infection? The West Nile virus infection is spread by the bite of infected mosquitoes and usually causes a mild illness, but it may also cause encephalitis (inflammation of the brain), meningitis (inflammation of the lining of the brain and spinal cord), or polio-like paralysis. This virus is named after the West Nile region of Uganda where the virus was first isolated in 1937. It was first identified in the United States in New York in 1999.

**Who gets West Nile virus infection?** Anyone can get West Nile virus infection if bitten by an infected mosquito; however, even in areas where transmission of West Nile virus is known to be occurring, only a small proportion of mosquitoes are likely to be infected. Less than 1% of people bitten by an infected mosquito will become seriously ill. Persons who are over age 50, the elderly, and those with weakened immune systems are at greater risk of developing a more severe form of the illness.

**How is West Nile virus spread?** West Nile virus is almost always spread by the bite of an infected mosquito. Mosquitoes are infected by biting a bird that carries the virus. West Nile virus is not spread from person to person or directly from birds to humans, but some cases have resulted from blood transfusion and organ transplants. There may be a chance that infected mothers may transmit the virus to their unborn or nursing children.

**I've gotten a mosquito bite. Should I be tested for West Nile virus infection?** No, most mosquitoes are not infected with West Nile virus. See a physician if you develop the symptoms below.

**What are the symptoms of West Nile virus infection?** The disease may be mild or serious. Mild illness includes fever and muscle aches, swollen lymph glands, and sometimes a skin rash. In the elderly, infection may spread to the nervous system or bloodstream and cause sudden fever, intense headache, stiff neck, and confusion, possibly resulting in encephalitis or meningitis. Healthy children and adults may not have any symptoms.

**How soon after exposure do symptoms appear?** The symptoms generally appear about 3 to 14 days after exposure but may appear as soon as 1 day after exposure or as late as 7 or more days.

**Does past infection with West Nile virus make a person immune?** Yes, a person who gets West Nile virus probably cannot get it again.

**What is the treatment for West Nile virus infection? Is there a vaccine for West Nile virus?** There is no specific treatment. Supportive therapy will be used in more severe cases. Most people recover from this illness. There is no vaccine for humans.

**How can West Nile virus infection be prevented?** By controlling the mosquito population and protecting against mosquito bites in the following ways:

1. Wear long, loose, and light-colored clothing.
2. If possible, stay indoors when mosquitoes are biting.
3. Use insect repellent with the smallest percentage of DEET necessary for the length of time you are exposed to mosquitoes, but no more than 50% for adults and 10% for children under 12.
4. Turn over or remove containers in your yard where water collects, such as old tires, potted plant trays, buckets, and toys.
5. Eliminate standing water on tarps or flat roofs.
6. Clean out birdbaths and wading pools once a week.

7. Clean roof gutters and downspout screens.

**Where can I get more information on West Nile virus?** Call your local health department or visit the following web sites:

New River Health District [www.vdh.state.va.us/lhd/newriver/index.htm](http://www.vdh.state.va.us/lhd/newriver/index.htm)

Virginia Department of Health [www.vdh.state.va.us/epi/wnv.htm](http://www.vdh.state.va.us/epi/wnv.htm)

U. S. Centers for Disease Control and Prevention [www.cdc.gov/ncidod/dvbid/westnile/index.htm](http://www.cdc.gov/ncidod/dvbid/westnile/index.htm)

American Mosquito Prevention and Control Association <http://www.mosquito.org/>

Virginia Mosquito Control Association [www.mosquito-va.org/index.html](http://www.mosquito-va.org/index.html)

U.S. EPA Pesticides & Mosquito Control [www.epa.gov/pesticides](http://www.epa.gov/pesticides)

Virginia Department of Agriculture and Consumer Services (VDACS) [www.vdacs.state.va.us/index.html](http://www.vdacs.state.va.us/index.html)

National Pesticide Telecommunications Network (NPTN) <http://ace.orst.edu/info/nptn/wnv.htm>

*Prepared by the New River Health District, May 2003*



[Back](#)

[District Home Page](#)

[Top of Page](#)